

Date: Tue, 6 Jul 93 13:08:17 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #824
To: Info-Hams

Info-Hams Digest Tue, 6 Jul 93 Volume 93 : Issue 824

Today's Topics:

Center-Fed Antennas
Earthwinds Balloon
Frequency Spectrum Chart
Morse code trainer for Workstations?
Need a dual band HT (2 msgs)
PK88 HELP
Recharging ALKALINE batteries
Repeater coordination, complaints?
REQUESTING CUSTOM CALLSIGNS ??? (3 msgs)
resonant antenna and vswr (3 msgs)
tornado last night
VHF/UHF coax questions
ZL readers - THANKS!

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 6 Jul 93 19:29:00 GMT
From: butch!enterprise!news@uunet.uu.net
Subject: Center-Fed Antennas
To: info-hams@ucsd.edu

In article <930704013924_8@ccm.hf.intel.com> Cecil_A_Moore@ccm.hf.INTeL.COM (Cecil A Moore) writes:

>From: Cecil_A_Moore@ccm.hf.INTeL.COM (Cecil A Moore)
>Subject: Center-Fed Antennas
>Date: 4 Jul 93 09:39:24 GMT

Hi Cecil!

Some stuff deleted.....

> Here's my conclusions: Any antenna similar to the G5RV,
>(center-fed with a twin-lead matching section connected to coax
>through a balun or not), has a fundamental resonant frequency close
>to $468/\text{Length}$. The matching section functions according to the
>equations for series-section transmission lines/transformers and the
>length of the right-angle matching section does not appreciably
>affect the resonant frequencies of the antenna. SWR is high except
>at odd multiples of the fundamental frequency. Any coax in the
>system is part of a transmission line transformer.

The trick with the G5RV is to keep it non-resonant, but as you say *close*, that's the operative word. I have spent more time than it is probably worth working with a G5RV, but it was driven by the space in my yard and the ability to get a tower up. I found it was best to stick with Tony's original design and cut the flat-top to exactly 102 ft. This is *close* to 3 half waves in phase on 20m but not exactly, and keeps you far enough away from the even harmonic lengths that are problems for pure dipoles. Some time was spent with the so-called makeup section of twin lead and I opted for old fashioned open wire line (5-inch spaced) at the recommended 34 foot length. Grid dipping this antenna at the feed point shows resonances that are *close* but not inside the amateur bands <G>. I chose wide spaced line for the power handling I wanted, as most commercially marketed G5RVs' have a so-called balun that cannot stand up to the voltage and swr encountered at the feed point when higher than transceiver power is run. I know this will kick off a bunch of responses, but the following has been my method of coupling to the amplifier: I run a length of coax to the antenna tuner (a tuner is a must with a G5RV) that is *close* to half wave multiples (with the exception of 75-80m) inside the amateur bands, say 65 ft., factored by the velocity of the cable. This presents almost the same electrical conditions, encountered at the open line to coax junction, to the tuner. Instead of a balun I have a large 10-inch ferrite doughnut of MN-34 material with 15 turns of the coax wound around it at the coax/open wire junction. A choke made of several turns of coax coiled up in a 10-inch loop will work almost as well. The idea is to keep RF current off the outer conductor of the coax. I use an MFJ Versa-Tuner V to tune the whole mess, and it handles inputs from my SB-220 just fine. I used RG-8 type cable and the MFJ tuner along with the open wire line to get the power handling qualities of the system. A good earth ground at the tuner is a must, with the shortest length of 1 to 2-inch braid making the connection. By pure luck, the only way I could put this antenna up was with it running NorthWest to SouthEast, but that gives me major pattern lobes over the pole into Central Asia on 15m. All works well on the WARC bands as well, in fact I have not found a frequency that I cannot *tune up* on.

> ...and it was 111 degrees while I was doing all of this...

I always wait until February to work on antennas in NH.

73, Joel
--KC1SG--

Date: 5 Jul 1993 16:22:21 -0500
From: ddsww1!hp1.holl.com!sashimi.lcu.com!not-for-mail@uunet.uu.net
Subject: Earthwinds Balloon
To: info-hams@ucsd.edu

I read a very interesting article by WB8ELK regarding the Earthwinds balloon and the unfortunate aborted launch in the May 93 Radio Fun magazine.

I was wondering if anyone is keeping tabs on the project and can tell me how things are going, when the new launch date is, etc.???

Does WB8ELK have an e-mail address?

thanks,

dave

--

David Vrona N9QNZ	+1 708 680 2829 (voice)
Lake County Unix	+1 708 680 2123 (fax)
2000 Hollister Drive	Internet: dave@sashimi.lcu.com
Libertyville, IL 60048-3781	UUCP: {well connected}!clout!sashimi!dave

Date: 6 Jul 93 11:56:43 GMT
From: news-mail-gateway@ucsd.edu
Subject: Frequency Spectrum Chart
To: info-hams@ucsd.edu

I bought a LARGE wall-size chart (1 x 1.5 m) of the radio spectrum allocations from the bookstore of the United Nations in New York. I think it was put out by ITU. Of course that was some decades ago, but might still be a source.

73 de w3otc@amsat.org

Date: Tue, 6 Jul 1993 15:21:52 GMT

From: usc!howland.reston.ans.net!ux1.cso.uiuc.edu!milo.mcs.anl.gov!
godzilla.mcs.anl.gov!lent@network.UCSD.EDU
Subject: Morse code trainer for Workstations?
To: info-hams@ucsd.edu

What kind of morse code trainers exit for workstations machines,
or maybe I should say do they exist? The machines I am looking
at are SGI, Suns, and NeXT.
Do such animals exist?

you can reply to lent@mcs.anl.gov and if I get enought replies
I will summarize.
thanks
elent

Date: Tue, 6 Jul 93 14:52:58 GMT
From: ucla-ma!julia!hgw@locus.ucla.edu
Subject: Need a dual band HT
To: info-hams@ucsd.edu

Hi,

I'm about to take my tech test this saturday and now I'm starting to
look for a Dual band HT on 2m and 70cm. Does anybody have any
recommendations?

I know this subject gets tossed around often, is there an archive of
all past postings?

Thanks.

Harold

Date: 6 Jul 1993 11:11:17 -0700
From: techbook.com!techbook.com!not-for-mail@uunet.uu.net
Subject: Need a dual band HT
To: info-hams@ucsd.edu

Harold Wong (hgw@julia.math.ucla.edu) wrote:
: Hi,

: I'm about to take my tech test this saturday and now I'm starting to
: look for a Dual band HT on 2m and 70cm. Does anybody have any
: recommendations?

: I know this subject gets tossed around often, is there an archive of
: all past postings?

: Thanks.

: Harold

Here is my response to a previous request on this subject. I had
considerable trouble coming to a decision as to which radio to buy....

>>

>> Gene,

>>

>> Did you compare the FT530 to the Alinco DJ580? I have the 580 and I
>> need to purchase a radio for my wife. I have been eyeing the FT530.
>> What was your motivation?

>>

>> Thanks,

>> Charles

>>

>I probably did not give Alinco a very fair chance. I heard a couple of folks
> speak in generally disparaging terms of Alinco and read someone posting on
> the net complaining about darn near burning their hand on the DJ580 when
> running full power in their car, (as I intend to do).

>

>I seriously considered Yaesu FT-530, ICOM w21at, and Kenwood TH-78a.

>

>Although I liked the feel of the Kenwood, as well as it's ability to display
> an ascii text string identifying a memorized channel, I read 2 or 3 people
> complaining that the receiver was overwhelmed by intermod, ect., when
> connected to a base antenna, (I plan to do that too).

>

>I very nearly bought the W21at but finally concluded that I was leaning
> toward it for esthetic reasons. Since the radio and everything you buy for
> it are significantly more expensive than the other two brands I decided to
> reconsider. I concluded that I did not care THAT much about how the thing
> looked.

>I also discovered that the companies which make a specialized earphone/mike
> I wanted can't get them to work on ICOM's.

>I never found any W21at owners to ask their opinion.

>

>I considered Standard as well. I suspect they make a good product.
> Sadly, they do not market it well, at least here in the west. The dealers
> will get it for you but stock nothing. It occurred to me that I might
> very well have to order everything I would ever want for a Standard

>and wait for it to be shipped into town. Also, they did not bother to
>show up at our regional ham fest. They don't seem too serious about
>doing business out here.

>

>Comparing features, I decided that the Yaesu had all the newest bells and
>whistles I wanted for the most reasonable price. I spoke to several Yaesu
>owners and heard only positive comments. The dealers all stock the
>accessories you might want. And it did not hurt that Yaesu was at the
>Seaside, Oregon, hamfest handing out \$20.00 discount coupons!

>If you have seen any Yaesu ad's showing their lighted display and buttons,
>reality is just as bright! Reading it in the dark is NO problem.

>

>Be aware that these "latest and greatest" 2 band radio's have MANY nice
>features and MANY buttons to learn. You will likely keep that manual
>real handy for a while!

>

>Have fun.

>Gene

>

Since I bought my FT-530 I have made additional observations:

1. I have heard a couple of hams on 2 meters who were mad as hell at Alinco, something about a hardware/software glitch they were having trouble getting corrected.

2. I originally thought that the Kenwood method of hiding the touch-tone keypad behind a protective cover was a positive feature. Having now used a "latest and greatest" HT I find that I FREQUENTLY use the keypad to access or adjust the exotic features these radios provide. I'm not so sure hiding the pad would be handy.

3. Although I have been able to get everything else I want for my Yaesu, they are apparently not shipping the basic 12v power cable for it, (the one without the cig. lighter plug). Naturally the rigs power connector is an odd size and can't be had elsewhere.

price with cig. plug = \$24.00

price without cig plug = \$7.00 not available!

4. If you live in a very congested rf environment, where intermod is going to be a big problem, there may be some merit to buying single band radios which do not offer the extended receive features that most of the newer radios seem to. I suspect that a radio designed to operate from 144-148 PERIOD might block out a LOT of intermod crap.

I drove up on top of a nearby mountain which hosts amateur repeaters, pager services, and commercial broadcasting.

A couple of thousand feet down was fine but up on top my FT-530 was blitzkreiged with bs.

Good luck coming to a conclusion,
Gene

--

Those who beat their swords into plowshares
are destined to plow for those who don't.
genew@techbook.COM

Please direct flames to: genew@ucant.gethere.frmhere

Date: 5 Jul 93 21:28:00 GMT
From: twwells!pics!james.mollica@RUTGERS.EDU
Subject: PK88 HELP
To: info-hams@ucsd.edu

What is the latest firmware release date for the pk88? I have a pk88 with a release date of 28 Jul.88 \$34 checksum. This must be an early unit since it does not have the battery backup. Any info on updates from AEA if offered will be appreciated. Tnx es 73, Jim N2NRD.

Jim

* 1st 1.10 #1439 * DXING OSCAR 13 145.890 AND SAREX 145.550! N2NRD @ AMSAT.ORG

+-----+
| Pics OnLine MultiUser System 609/753-2540 HST 609/753-2605 (V32bis) |
| Massive File Collection - Over 45,000 Files OnLine - 250 Newsgroups |
+-----+

Date: Tue, 6 Jul 93 18:56:05 GMT
From: btree!hale@network.UCSD.EDU
Subject: Recharging ALKALINE batteries
To: info-hams@ucsd.edu

In article <1993Jul5.200048.15641@bongo.tele.com> julian@bongo.tele.com (Julian Macassey) writes:

[about the "Buddy-L" alkaline recharger/exploder deleted]

> Also, how come no-one has built a "made for recharging"
>alkaline?

>

> I don't think the shareholders of Union Carbide or the
>manufacturers of Ni-Cads are too worried.

Ray-O-Vac has started to advertise a rechargeable alkaline cell.

It is supposed to be good for up to 25 rechargings, and it is supposed to have 4 times the energy storage of an equivalent NiCd cell. This latter claim is easy to believe; the former claim remains to be verified by real-world experience.

Apparently Ray-0-Vac was spurred into action by another battery company (name unknown to me) which already has such a product ready for the market.

Bob Hale
...!hale@brooktree.com (preferred)

...!ucsd!btree!hale

Date: 6 Jul 93 13:53:31 GMT
From: usc!howland.reston.ans.net!gatech!concert!duke!news.duke.edu!
ee.egr.duke.edu!jbs@network.UCSD.EDU
Subject: Repeater coordination, complaints?
To: info-hams@ucsd.edu

In article <49o56B3w165w@jackatak.raider.net> root@jackatak.raider.net (Jack GF Hill) writes:

>> Very cheap for the repeater owner perhaps, but not the users. Perhaps you
>> didn't notice that PL decode is optional on most mobile rigs?

>Ah...excuse me....Jim....you bought a "new" 2 meter mobile rig lately
>without PL??? Where? How much? Under \$100?

I just bought a Yaesu FT-5200, new, that didn't come with PL decode.
\$539. The PL decode board was about another \$40. Ditto for the DTMF decode
board.

-joe KD4LLV

--

You spend the night
Like you were spending a dime
- Lyle Lovett

Date: 6 Jul 1993 07:06 EDT
From: haven.umd.edu!cs.umd.edu!skates.gsfc.nasa.gov!nssdca.gsfc.nasa.gov!
stocker@uunet.uu.net
Subject: REQUESTING CUSTOM CALLSIGNS ???
To: info-hams@ucsd.edu

In article <219q51\$he7@usenet.INS.CWRU.Edu>, dd711@cleveland.Freenet.Edu (Charles

W. Reti) writes...

>

>Another comment (mild FCC flame?) is that I find it amazing how,
>in countries with supposedly more inept bureaucracies than those
>in the U.S., special event calls, contest calls,etc. are issued
>routinely and apparently without the aid of a mainframe database.
>ONE WOULD THINK, that with the ease with which you and I can
>bring up a callsign database, edit and manipulate it with our
>desktop PCs,our FCC might be able to do the same without added
>expense or personnel.

>*****
>* Chuck Reti Detroit,Michigan * "kill *
>* Internet:dd711@cleveland.freenet.edu * ugly *
>* ChuckR1171@aol.com * radio" *
>* AX.25 packet:WV8A@wb8zpn.#semi.mi.usa.na * *
>* AMPRnet:wv8a@wv8a.ampr.org[44.102.48.54] * -F. Zappa *
>*****

(mild FCC defense)

While I have a great tendency to agree that our governmental agencies have become too bureaucratic, I don't think that the whole fault lies with the FCC. First I suspect that the computers that the FCC has are probably old. Second, for some strange reason proabably going back to the late 50s and early 60s, ADP equipment purchases of any kind by governmental agencies must be approved by the GSA. This group knows absolutely nothing about how systems are constructed or procured since the great "PC revolution". If the FCC wants to get some modern, useful and adaptable equipment and/or systems, they must get two things: (1) the budget to procure; (2) permission to procure from GSA.

Given the very low level of FCC involvement with ham radio, I don't think that amateur radio could serve as the driver to getting the necessary funds. As far as the GSA goes, even if the FCC had the money, I'm not confident that the GSA could be made to understand what the FCC really wanted or needed. Even so and the FCC got GSA approval, you can bet it will add one many months of unnecessary time and a bunch of dollars. The cost of continuing to report to the GSA during the procurmenet process would continue to increase.

The government's mechanism for procuring systems, software and hardware are out of date and out of synch with the current computer market. This makes it difficult for any agency to get what they truly need in a quick and cost effective manner. Until Congress (and the people who elect this guys) changes the rule, I don't think we should fully blame the FCC.

Erich

Date: 6 Jul 1993 12:32:47 GMT
From: swrinde!elroy.jpl.nasa.gov!news.larc.nasa.gov!eos1.larc.nasa.gov!
eckman@network.UCSD.EDU
Subject: REQUESTING CUSTOM CALLSIGNS ???
To: info-hams@ucsd.edu

In article <6JUL199307065555@nssdca.gsfc.nasa.gov> stocker@nssdca.gsfc.nasa.gov
(ERICH FRANZ STOCKER) writes:

>
>(mild FCC defense)
>While I have a great tendency to agree that our governmental agencies have
>become too bureaucratic, I don't think that the whole fault lies with the
>FCC. First I suspect that the computers that the FCC has are probably
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>50s and early 60s, ADP equipment purchases of any kind by governmental
>agencies must be approved by the GSA. This group knows absolutely
>nothing about how systems are constructed or procured since the great
>"PC revolution". If the FCC wants to get some modern, useful and adaptable
>equipment and/or systems, they must get two things: (1) the budget to
>procure; (2) permission to procure from GSA.
>

This is news to me! I procure workstations frequently for our
research group. As long as the total cost is under \$25K,
the request does not require any approvals outside of our center.
For larger purchases, the purchase request must be published in
the 'Congressional Business Daily' for possible competitive bidding.
Maybe the GSA gets involved at this point, but I've never been aware
of any GSA involvement after purchasing over \$140K of unix workstations
over the last few years.

Richard Eckman
NASA Langley Research Center
Hampton, VA

Date: Tue, 6 Jul 93 16:10:18 GMT
From: pipex!uknet!uos-ee!ee.surrey.ac.uk!M.Willis@uunet.uu.net
Subject: REQUESTING CUSTOM CALLSIGNS ???
To: info-hams@ucsd.edu

In article <219q5l\$he7@usenet.INS.CWRU.Edu>, dd711@cleveland.Freenet.Edu (Charles
W. Reti) writes:

|>
|> In another reply to Requesting custom callsigns??? Marc B Grant,
|> N5MEI wrote
|>

|>
|> Another comment (mild FCC flame?) is that I find it amazing how,
|> in countries with supposedly more inept bureaucracies than those
|> in the U.S., special event calls, contest calls, etc. are issued
|> routinely and apparently without the aid of a mainframe database.
|> ONE WOULD THINK, that with the ease with which you and I can
|> bring up a callsign database, edit and manipulate it with our
|> desktop PCs, our FCC might be able to do the same without added
|> expense or personnel.

If *you* were to provide them with a PC and suitable software maybe they would do what you want.

Date: 6 Jul 1993 16:56:18 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
ux1.cso.uiuc.edu!usenet.ucs.indiana.edu!master.cs.rose-hulman.edu!master.cs.rose-
hulman.edu!news@network.UCSD.EDU
Subject: resonant antenna and vswr
To: info-hams@ucsd.edu

The other day I heard a ham on a wide area repeater explaining to another
(new) ham that the way to achieve a low vswr is by making sure that the
antenna is resonant.

No wonder new hams seem to not know much when us older, more experienced,
wiser amateurs keep trying to pull the wool over their eyes.

Phooey! Jack, K9CUN

Date: Tue, 6 Jul 1993 17:59:17 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!usc!sdd.hp.com!
col.hp.com!news.dtc.hp.com!hpscit.sc.hp.com!cupnews@cup.hp.com!
jholly@network.UCSD.EDU
Subject: resonant antenna and vswr
To: info-hams@ucsd.edu

John Derry (derry@NeXTwork.Rose-Hulman.Edu) wrote:
: The other day I heard a ham on a wide area repeater explaining to another
: (new) ham that the way to achieve a low vswr is by making sure that the
: antenna is resonant.

: No wonder new hams seem to not know much when us older, more experienced,
: wiser amateurs keep trying to pull the wool over their eyes.

: Phooey! Jack, K9CUN

Am I missing something here? Let's see, a resonant inverted vee has an impedance of around 50 ohms, my transmitter is set up for 50 ohm output, I use 50 ohm cable. Seems to me if I make the inverted vee resonant, my vswr would be pretty low. Jack, I would be interested in hearing your explanation why the advice of making the antenna resonant is bad advice and is sending the new ham off to get a can of 'bitter ends'.

Jim, WA6SDM

jholly@cup.hp.com

Date: Tue, 6 Jul 1993 19:29:59 GMT

From: sdd.hp.com!col.hp.com!news.dtc.hp.com!srigenprp!alanb@network.UCSD.EDU

Subject: resonant antenna and vswr

To: info-hams@ucsd.edu

Jim Hollenback (jholly@cup.hp.com) wrote:

: John Derry (derry@NeXTwork.Rose-Hulman.Edu) wrote:

: : The other day I heard a ham on a wide area repeater explaining to another
: : (new) ham that the way to achieve a low vswr is by making sure that the
: : antenna is resonant.

: : No wonder new hams seem to not know much when us older, more experienced,
: : wiser amateurs keep trying to pull the wool over their eyes.

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: of around 50 ohms, my transmitter is set up for 50 ohm output, I use 50 ohm
: cable. Seems to me if I make the inverted vee resonant, my vswr would be
: pretty low...

Resonance does not guarantee low SWR and low SWR does not imply resonance.
You could take a perfect, resonant dipole antenna, and if you feed it
with 300-ohm twin lead, you will have high SWR. Even if use 50 ohm coax,
you will get high SWR if you feed the antenna at the end.

Conversely, a non-resonant antenna can have a low SWR if you match it
correctly.

The correspondence between resonance and low SWR only applies if you are
talking about certain antenna systems -- for example, a center-fed,
half-wave dipole fed with 50 or 75 ohm coax.

AL N1AL

Date: 6 Jul 93 18:58:26 GMT
From: ogicse!uwm.edu!math.ohio-state.edu!news.acns.nwu.edu!casbah.acns.nwu.edu!
lapin@network.UCSD.EDU
Subject: tornado last night
To: info-hams@ucsd.edu

In article <1993Jul2.165045.10832@hemlock.cray.com> dadams@cray.com writes:

>
>Is there a role for Hams in situations like these?
>
>Tornado last night.
>
>Or was it just High winds? We don't know for sure,
>but it whiped through our neighborhood last night!
>...stuff deleted...
>David, NOWWN (from work)

Yes, hams take part in this all the time. There are Skywarn nets here in Northern Illinois and are probably in Minnesota also. Last Spring the US Weather Service offered an Advanced Weather Spotter course that taught us to recognize tornados, severe storms, etc. The ham nets communicate with the Weather Service and these reports lead to the Warnings issued by the Weather Service.

Greg Lapin KD9AZ
glapin@nwu.edu

Date: 6 Jul 1993 16:48:27 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
ux1.cso.uiuc.edu!usenet.ucsf.edu!master.cs.rose-hulman.edu!master.cs.rose-hulman.edu!news@network.UCSD.EDU
Subject: VHF/UHF coax questions
To: info-hams@ucsd.edu

In article <01062011.5kojia@centauri.dmc.com> writes:

> I'm putting up a dual-band (144 and 440) antenna, and am wondering
> what type of 50-ohm coax cable to buy. Is RG-8/U my best bet for VHF/UHF
> operation? Can I use the cheaper RG-58 coax? Thanks.

>

> -----

> Chris Kent, N1PJK
> 375 Pond St.

>

> Dunstable, MA 01827-2310

Internet: ckent@centauri.dmc.com

UUCP: uunet.uu.net!thehulk!

centauri.dmc.com!ckent

Phone: (508) 649-9950

RG-8 maybe if short run, if you can stand the loss. RG-58, not recommended, way too lossy! Same for socalled RG-8X or M.

9913 or equivalent (poor man's hard line) would be better.

ARRL Handbook or Antenna Manual has good discussion about transmission lines with lots of nice data on various commonly used transmission lines.

73 de K9CUN, Jack

Date: Tue, 6 Jul 1993 12:16:07 GMT
From: usc!howland.reston.ans.net!agate!doc.ic.ac.uk!syma!mpfb8@network.UCSD.EDU
Subject: ZL readers - THANKS!
To: info-hams@ucsd.edu

Many thanks to all you ZL readers who responded to my request for information on ZL magazines. I have now subscribed to "Break-in" and received my first copy today. Interesting reading.
CU on the air...73...Peter, G4BVH.

End of Info-Hams Digest V93 #824
